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TITLE 17

Group 4. ~~DRINKING WATER SUPPLIES~~

~~ARTICLE 1. GENERAL~~

Section 7583. Definitions

~~In addition to the definitions in Section 4010.1 of the Health and Safety Code, the following terms are defined for the purpose of this Chapter:~~

(a) ~~“Approved Water Supply” is a water supply whose potability is regulated by a State or local health agency.~~

(b) ~~“Auxiliary Water Supply” is any water supply other than that received from a public water system.~~

(c) ~~“Air gap Separation (AG)” is a physical break between the supply line and a receiving vessel.~~

(d) ~~“AWWA Standard” is an official standard developed and approved by the American Water Works Association (AWWA).~~

(e) ~~“Cross Connection” is an unprotected actual or potential connection between a potable water system used to supply water for drinking purposes and any source or system containing unapproved water or a substance that is not or cannot be approved as safe, wholesome, and potable. By pass arrangements, jumper connections, removable sections, swivel or changeover devices, or other devices through which backflow could occur, shall be considered to be cross connections.~~

(f) ~~“Double Check Valve Assembly (DC)” is an assembly of at least two independently acting check valves including tightly closing shut off valves on each side of the check valve assembly and test cocks available for testing the watertightness of each check valve.~~

(g) ~~“Health Agency” means the California Department of Health Services, or the local health officer with respect to a small water system.~~

(h) ~~“Local Health Agency” means the county or city health authority.~~

(i) ~~“Reclaimed Water” is a wastewater which as a result of treatment is suitable for uses other than potable use.~~

(j) ~~“Reduced Pressure Principle Backflow Prevention Device (RP)” is a backflow preventer incorporating not less than two check valves, an automatically operated differential relief valve located between the two check valves, a tightly closing shut off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing.~~

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(k) ~~“User Connection” is the point of connection of a user’s piping to the water supplier’s facilities.~~

(l) ~~“Water Supplier” is the person who owns or operates the public water system.~~

(m) ~~“Water User” is any person obtaining water from a public water supply.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Section 7584. Responsibility and scope of program

~~The water supplier shall protect the public water supply from contamination by implementation of a cross connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier’s cross connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not be limited to, the following elements:~~

~~(a) The adoption of operating rules or ordinances to implement the cross connection program.~~

~~(b) The conducting of surveys to identify water user premises where cross-connections are likely to occur.~~

~~(c) The provisions of backflow protection by the water user at the user’s connection or within the user’s premises or both.~~

~~(d) The provision of at least one person trained in cross connection control to carry out the cross connection program.~~

~~(e) The establishment of a procedure or system for testing backflow preventers, and~~

~~(f) The maintenance of records of locations, tests, and repairs of backflow preventers.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

Section 7585. Evaluation of hazard

~~The water supplier shall evaluate the degree of potential health hazard to the public water supply which may be created as a result of conditions existing on a user’s premises. The water supplier, however, shall not be responsible for abatement of cross connections which may exist within a user’s premises. As a minimum, the evaluation should consider: the existence of cross connections, the nature of materials handled on the~~

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property, the probability of a backflow occurring, the degree of piping system complexity and the potential for piping system modification. Special consideration shall be given to the premises of the following types of water users:

~~(a) Premises where substances harmful to health are handled under pressure in a manner which could permit their entry into the public water system. This includes chemical or biological process waters and water from public water supplies which have deteriorated in sanitary quality.~~

~~(b) Premises having an auxiliary water supply, unless the auxiliary supply is accepted as an additional source by the water supplier and is approved by the health agency.~~

~~(c) Premises that have internal cross connections that are not abated to the satisfaction of the water supplier or the health agency.~~

~~(d) Premises where cross connections are likely to occur and entry is restricted so the cross connection inspections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross connections do not exist.~~

~~(e) Premises having a repeated history of cross connections being established or re-established.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code.
Reference: Section 4026, Health and Safety Code.

~~Section 7586. User supervisor~~

~~The health agency and water supplier may, at their discretion, require an industrial water user to designate a user supervisor when the water user's premises has a multipiping system that convey various types of fluids, some of which may be hazardous and where changes in the piping system are frequently made. The user supervisor shall be responsible for the avoidance of cross connections during the installation, operation and maintenance of the water user's pipelines and equipment.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code.
Reference: Section 4026, Health and Safety Code.

~~ARTICLE 2. PROTECTION OF WATER SYSTEM~~

~~Section 7601. Approval of backflow preventers~~

~~Backflow preventers required by this Chapter shall have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated their competency to perform such tests to the Department.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code.
Reference: Section 4026, Health and Safety Code.

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~~Section 7602. Construction of backflow preventers~~

~~(a) Air gap Separation. An Air gap separation (AG) shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe; however, in no case shall this separation be less than one inch.~~

~~(b) Double Check Valve Assembly. A required double check valve assembly (DC) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Double Check Valve Type Backflow Preventive Devices which is herein incorporated by reference.~~

~~(c) Reduce Pressure Principle Backflow Prevention Device. A required reduced pressure principle backflow prevention device (RP) shall, as a minimum, conform to the AWWA Standard C506-78 (R83) adopted on January 28, 1978 for Reduced Pressure Principle Type Backflow Prevention Devices which is herein incorporated by reference.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code.

Reference: Section 4026, Health and Safety Code.

~~Section 7603. Location of backflow preventers~~

~~(a) Air gap Separation. An air gap separation shall be located as close as practical to the user's connection and all piping between the user's connection and the receiving tank shall be entirely visible unless otherwise approved in writing by the water supplier and the health agency.~~

~~(b) Double Check Valve Assembly. A double check valve assembly shall be located as close as practical to the user's connection and shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance.~~

~~(c) Reduced Pressure Principle Backflow Prevention Device. A reduced pressure principle backflow prevention device shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches (12") above grade and not more than thirty six (36") above grade measured from the bottom of the device and with a minimum of twelve inches (12") side clearance.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code. Reference: Section 4026, Health and Safety Code.

~~Section 7604. Type of protection required~~

~~The type of protection that shall be provided to prevent backflow into the public water supply shall be commensurate with the degree of hazard that exists on the consumer's premises. The type of protective device that may be required (listed in an increasing level of protection) includes: Double Check Valve Assembly (DC), Reduced Pressure Principle Backflow Prevention Device (RP), and an Air gap Separation (AG). The water user may choose a higher level of protection than required by the water supplier. The minimum types of backflow protection required to protect the public water supply, at the water user's connection to premises with various degrees of hazard are given in Table~~

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1. Situations which are not covered in Table 1 shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the water supplier or health agency.

Table 1
Type of Backflow Protection Required
Degree of Hazard

~~(a) Sewage and Hazardous Substances~~

~~(1) Premises where there are waste water pumping _____ AG
and/or treatment plants and there is no interconnection with the potable _____
water system. This does not include a single family residence that has _____
a sewage lift pump. A RP be provided in lieu of an AG if approved by _____
the health agency and water supplier.~~

~~(2) Premises where hazardous substances are handled in _____ AG
any manner in which the substance may enter the potable water system. _____
This does not include a single family residence that has a sewage lift pump. _____
An RP may be provided in lieu of an AG if approved by the health agency _____
and water supplier.~~

~~(3) Premises where there are irrigation systems into which _____ RP
fertilizers, herbicides, or pesticides are, or can be, injected.~~

~~(b) Auxiliary Water Supplies~~

~~(1) Premises where there is an unapproved auxiliary supply _____ AG
which is interconnected with the public water system. A RP or DC may be _____
provided in lieu of an AG if approved by the health agency and water _____
supplier.~~

~~(2) Premises where there is an unapproved auxiliary _____ RP
water supply and there are no interconnections with the public water system. _____
A DC may be provided in lieu of a RP if approved by the health agency and _____
water supplier.~~

~~(c) Recycled Water~~

~~(1) Premises where the public water system is used to _____ AG
supplement the recycled water supply.~~

~~(2) Premises where recycled water is used, other than as _____ RP
allowed in paragraph (3), and there is no interconnection with the potable
water system.~~

~~(3) Residences using recycled water for landscape irrigation _____ DC
as part of an approved dual plumbed use area established pursuant to sections _____
60313 through 60316 unless the recycled water supplier obtains approval of _____
the local public water supplier, or the department if the water supplier is also _____
the supplier of the recycled water, to utilize an alternative backflow protection _____
plan that includes an annual inspection and annual shut down test of the _____
recycled water and potable water systems pursuant to subsection 60316 (a).~~

~~(e) Fire Protection Systems~~

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~~(1) Premises where the fire system is directly supplied from the public water system and there is an unapproved auxiliary water supply on or to the premises (not interconnected). DC~~

~~(2) Premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply. An RP may be provided in lieu of an AG if approved by the health agency and water supplier. AG~~

~~(3) Premises where the fire system is supplied from the public water system and where either elevated storage tanks or fire pumps which take suction from private reservoirs or tanks are used. DC~~

~~(4) Buildings where the fire system is supplied from the public water system and where recycled water is used in a separate piping system within the same building. DC~~

~~(d) Dockside Watering Points and Marine Facilities~~

~~(1) Pier hydrants for supplying water to vessels for any purpose. RP~~

~~(2) Premises where there are marine facilities. RP~~

~~(e) Premises where entry is restricted so that inspections for cross connections cannot be made with sufficient frequency or a sufficiently short notice to assure that do not exist. RP~~

~~(f) Premises where there is a repeated history of cross connections being established or re-established. RP~~

NOTE: Authority cited: Section 116375, Health and Safety Code; and Section 13521, Water Code.

Reference: Section 116375, Health and Safety Code; and Sections 13520, 13521 and 13554(a)(3), Water Code.

~~Section 7605. Testing and maintenance of backflow preventers~~

~~(a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operations.~~

~~(b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.~~

~~(c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.~~

~~(d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.~~

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~~(e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.~~

~~(f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.~~

NOTE: Authority cited: Sections 208 and 4026, Health and Safety Code.

Reference: Section 4026, Health and Safety Code.

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Chapter 3. Water Recycling Criteria

Section 60301.700. Recycled Water Agency.

“Recycled Water Agency” means the public water supply system, or a public or privately owned or operated recycled water system, that delivers or proposes to deliver recycled water to a facility.

NOTE: Authority cited: Section 13521, Water Code.

Reference: Sections 13520 and 13521, Water Code.

ARTICLE 5. Dual Plumbed Recycled Water Systems

Section 60315. Design Requirements.

The public water supply shall not be used as a backup or supplemental source of water for a dual-plumbed recycled water system unless the connection between the two systems is protected by an air-gap separation which complies with the requirements of sections ~~7602 (A) and 7603 (A)~~ 64760(a) California Code of Regulations, and the approval of the public water system has been obtained.

NOTE: Authority cited: Section 13521, Water Code.

Reference: Sections 13521, 13523.1, 13553 and 13554, Water Code.

Section 60316. Operation Requirements.

(a) Prior to the initial operation of the dual-plumbed recycled water system ~~and annually thereafter~~, the recycled water agency shall ensure that the dual-plumbed system within each facility and use area is inspected and tested for possible cross connections (as defined in section 64750.20) with the potable water system. Thereafter, the dual-plumbed system shall be inspected annually. ~~The and recycled water~~ shall also be tested for possible cross connections at least once every four years unless the public water system or recycled water agency can document that there have been no plumbing changes in the dual-plumbed system. The testing for cross connections shall be conducted in accordance with the method described in the report submitted pursuant to section 60314. The inspections and the testing shall be performed by a cross connection control specialist certified by the California-Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection and testing ~~for the prior year~~ shall be submitted to the department within 30 days following completion of the testing.

(b) The recycled water agency shall notify the department and the public water system of any cross connection, or any incidence of backflow from the dual-plumbed recycled water system into the potable water system, on the user's premises within 24 hours of the discovery of the incident. The problem shall be corrected and the system retested before operation is resumed.

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~~(e) Any backflow prevention device installed to protect the public water system serving the dual plumbed recycled water system shall be inspected and maintained in accordance with section 7605 of Title 17, California Code of Regulations.~~

NOTE: Authority cited: Section 13521, Water Code.

Reference: Sections 13521, 13553 and 13554, Water Code.

Chapter 19. Backflow Prevention and Cross Connection Control

ARTICLE 1. DEFINITIONS AND RESPONSIBILITY.

Section 64750.10. Air-Gap Separation.

“Air-gap separation” means a physical vertical separation between the free flowing discharge end of a potable water supply pipeline and an open or nonpressurized receiving vessel.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.12. Approved Water Supply.

“Approved water supply” means a water source that has been approved by the Department for domestic use and designated as such in a domestic water supply permit, pursuant to section 64254.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.14. Auxiliary Water Supply.

“Auxiliary water supply” means any source of water that does not meet the definition in section 64750.12 that is either used, or equipped to be used, as a water supply and located on, or piped to, the premises of a water user. (The term “equipped” in this definition means that appurtenances such as inactive wells, pumps, power supply, intakes, suction lines, pipelines, connection fittings, or storage tanks are in place and readily available for use.)

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.16. Backflow.

“Backflow” means a reversal of flow caused by differential pressure in which any liquid, gas, or other substance enters the public water system.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.18. Backflow Prevention Assembly.

“Backflow prevention assembly” means a device intended to prevent backflow.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

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Section 64750.20. Cross Connection.

“Cross-connection” means a structural arrangement between a public water system, or a piping system connected to the public water system and located on the premises of a water user, and any source or distribution system containing liquid, gas, or other substances not from an approved water supply.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.22. Cross-Connection Control Program Specialist.

“Cross-connection control program specialist” means a person who is certified as a cross-connection control program specialist by the California–Nevada Section of the American Water Works Association or an organization with equivalent certification requirements.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.24. Double Check Valve Assembly.

“Double check valve assembly” means two independently-acting, internally-loaded, check valves with shut-off valves located upstream and downstream of the two check valves, and test cocks to enable field testing.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.26. Premises.

“Premises” means the property under the ownership or control of the water user and served, or capable of being served, with water via a service connection with the public water system.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.25. Pressure Vacuum Breaker Assembly.

“Pressure vacuum breaker assembly” means the combination of an independently-acting, internally-loaded check valve and an independently-acting loaded air inlet valve located on its discharge side, with test cocks and shutoff valves attached at each end of the combination.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.

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Reference: Section 116375, Health and Safety Code.

Section 64750.26. Reduced Pressure Principle Assembly.

“Reduced pressure principle assembly” means two independently-acting, internally-loaded check valves with an automatic differential-pressure relief valve located inbetween, shut-off valves located upstream and downstream of the two check-valves, and test cocks to enable field testing.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 645750.28. Water Supplier.

“Water supplier” means any person who owns or operates a public water system.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.30. User’s Service Connection.

“User’s service connection” means the point of connection of a water user’s piping to the public water system.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64750.32. Water User.

“Water user” means any person that is authorized to receive water from the public water system.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64754. Responsibility.

A water supplier shall be responsible for protecting the public water system from backflow by complying with the requirements in this chapter.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

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ARTICLE 2. CROSS CONNECTION CONTROL HAZARD ASSESSMENT

Section 64755. Hazard Assessment.

(a) To evaluate the potential for backflow into the public water system, each community water system shall conduct an initial field and/or office assessment of the premises within its service area and each noncommunity water system shall conduct an initial field assessment of its water distribution system. The assessment shall consider:

- (1) The existence of actual or potential cross-connections;
- (2) The type and use of materials handled; and
- (3) The degree of piping system complexity and accessibility.

(b) Subsequent to the initial assessment described in subsection (a), the community water system shall:

- (1) Conduct an assessment of the premises of each new water user connected to the public water system; and
- (2) Re-evaluate the premises of an existing water user if changes within the water user's premises or any backflow incidents occur.

(c) Subsequent to the initial assessment described in subsection (a), the noncommunity water system shall re-evaluate its water distribution system if any changes or any backflow incidents occur.

(d) Each hazard assessment shall be performed by a cross-connection control program specialist, unless the Department approves an alternative based on its review of system size, types of water users, treatment, distribution system, and any previous hazard assessment.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

ARTICLE 3. BACKFLOW PROTECTION SELECTION CRITERIA AND STANDARDS

Section 64758. Type of Backflow Protection Required.

(a) Based on the results of the assessment conducted pursuant to section 64755 and using the hazard criteria specified in table 64758, the water supplier shall determine the minimum backflow protection, if any, to install. A community water system shall ensure that the protection is installed at the water user's service connection. A noncommunity water system shall ensure that protection is installed in the distribution system.

(1) The types of backflow protection that may be used are listed according to increasing level of protection as follows: Pressure vacuum breaker assembly, double check valve assembly, reduced pressure principal assembly, and air gap separation. For roadway right-of-way irrigation systems where there is no potential for backpressure, a pressure vacuum breaker assembly shall be considered more protective than a double check valve assembly.

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(2) If more than one of the hazard criteria applies to the premises of a water user, the criteria requiring the greatest degree of protection shall apply.

(b) The water supplier may allow protection at one level lower for the hazards designated in table 64758 as having that option, subject to the Department's approval based on a review that includes the hazard involved, the water system's cross connection control program, the rationale and justification for proposing the lower level of protection, and the water system's compliance history related to cross connection control.

(c) If an assessment of a premise could not be made pursuant to section 64755 to determine the type of hazard present, the water supplier shall ensure that an air gap separation is installed.

(d) If a hazardous situation exists on a water user's premises or in the public water system's distribution system that is not described in table 64758, the water supplier shall ensure that an appropriate type of backflow protection is installed.

**Table 64758. Hazard Criteria and
Appropriate Types of Backflow Protection**

| <i><u>Hazard</u></i> | <i><u>Required Level of Protection</u></i> |
|--|---|
| <u>(1) Auxiliary Water Supplies</u> | |
| <u>(A) Auxiliary supply that is interconnected with a piping system connected to the public water system (PWS)</u> | <u>Air gap separation¹</u> |
| <u>(B) Auxiliary supply that is not interconnected with a piping system connected to the PWS and has piped water conveyed under pressure in a piping system less than 200 feet from the piping system connected to the PWS</u> | <u>Reduced pressure principle¹</u> |
| | |
| <u>(2) Fire Protection Systems</u> | |
| <u>(A) Fire protection system interconnected with a piping system connected to the PWS and an onsite auxiliary water supply for fire fighting</u> | <u>Air gap separation¹</u> |
| <u>(B) Fire protection system supplied by the PWS with an interconnection to onsite storage facilities and pumps, or combined fire and industrial water</u> | <u>Reduced pressure principle²</u> |
| | |
| <u>(3) Marina or port facilities</u> | |
| <u>(A) Residential</u> | <u>Reduced pressure principle¹</u> |
| <u>(B) Nonresidential</u> | <u>Reduced pressure principle²</u> |
| | |
| <u>(4) Premises with multiple service connections to the PWS</u> | <u>Reduced pressure principle¹</u> |

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| <u>(5) Recycled Water or Gray water</u> (see graywater definition in Section 14876 of the California Water Code) | |
| (A) Recycled water supply system that is | |
| 1. interconnected to a piping system connected to the public water supply system (PWSS) | <u>Air gap separation²</u> |
| 2. not interconnected to a piping system connected to the PWSS | <u>Reduced pressure principle²</u> |
| (B) Residences using recycled water in an approved dual-plumbed use area established pursuant to sections 60313 through 60316. | <u>Double check valve³</u> |
| (C) System that produces, or collects and distributes, graywater, and is | |
| 1. interconnected to a piping system connected to the PWSS | <u>Air gap separation²</u> |
| 2. not interconnected to a piping system connected to the PWSS | <u>Reduced pressure principle²</u> |
| | |
| <u>(6) Sewage and Hazardous or Potentially Hazardous Substances</u> | |
| (A) Waste water treatment processes, handling and/or pumping equipment interconnected to a piping system connected to the PWS | <u>Air gap separation²</u> |
| (B) Waste water treatment processes, handling and/or pumping equipment not interconnected to a piping system connected to the PWS, except for a single-family residence that has a sewage lift pump | <u>Air gap separation¹</u> |
| (C) Premises handling a substance in any manner in which the substance may enter a piping system connected to the PWS. | <u>Air gap separation¹</u> |
| (D) Recreational vehicle dump station that is not interconnected to a piping system connected to the PWS | <u>Reduced pressure principle¹</u> |
| (E) Piped irrigation system interconnected to a piping system connected to the PWS, into which fertilizers, herbicides, or pesticides are, or are intended to be, injected into the irrigation water. | <u>Reduced pressure principle²</u> |
| (F) Piping system conveying a fluid not from an approved water supply that is | |
| 1. interconnected to a piping system connected to the PWS | <u>Air gap separation¹</u> |
| 2. not interconnected to a piping system connected to the PWS | <u>Reduced pressure principle¹</u> |
| | |
| <u>(7) Roadway right-of-way irrigation system interconnected to a piping system connected to the PWS, and there is no potential for back pressure</u> | <u>Pressure vacuum breaker¹</u> |

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| | |
| <u>(8) Water storage facility not under control of the PWS</u> | <u>Air gap separation¹</u> |
| | |
| <p>¹ <u>The water supplier may allow protection at one level lower than that designated, pursuant to subsection 64758(b).</u></p> <p>² <u>The water supplier shall not allow a lower level of protection than that designated.</u></p> <p>³ <u>If the recycled water supplier obtains the approval of the local public water supplier, or of the Department if the water supplier is also the supplier of the recycled water, an alternative backflow protection plan may be used that includes annual inspections and annual shut down tests of the recycled water and potable water systems.</u></p> | |

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64760. Standards for Types of Backflow Protection.

(a) The water supplier shall ensure that each air-gap separation meets the requirements in section 603.1.2 of the Uniform Plumbing Code

(b) The water supplier shall ensure that each installed pressure vacuum breaker, double check valve, and reduced pressure principle backflow prevention assembly:

(1) Meets the requirements in this chapter;

(2) Meets the applicable American Water Works Standards, as follows:

(A) C512-99 - Air Release, Air/Vacuum, and Combination Air Valves for Waterworks Service;

(B) C511-97 - Reduced-Pressure Principle Backflow Prevention Assembly;

or

(C) C510-97 - Double Check Valve Backflow Prevention Assembly

and

(3) Is approved through laboratory and field evaluation tests performed by the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California or an entity with equivalent testing requirements.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

ARTICLE 4. BACKFLOW PROTECTION INSTALLATION, TESTING AND REPAIRS.

Section 64762. Installation Criteria For Backflow Protection

(a) For air-gaps, the following shall apply:

(1) The receiving water container shall be located on the water user's premises at the water user's service connection unless an alternate location has been approved by the water supplier.

(2) All piping between the water user's service connection and the discharge location of the receiving water container shall be above finished grade and be accessible

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for visual inspection unless an alternative piping configuration is approved by the water supplier.

(3) The water supplier shall ensure that the air-gap specified in section 64760(a) has been installed.

(b) A reduced pressure principle backflow prevention assembly shall be installed such that the lowest point of the assembly is a minimum of twelve inches, and a maximum of 36 inches, above finished grade, unless an alternative is approved by the water supplier.

(c) A pressure vacuum breaker assembly shall be installed a minimum of twelve inches above all downstream piping.

(d) A reduced pressure principle or double check valve backflow prevention assembly installed after _____ shall have a minimum side clearance of twelve inches, except that a minimum side clearance of 24 inches shall be provided on the side of the assembly that contains the test cocks.

(e) Backflow protection shall be located at the water user's service connection unless one or more alternative locations have been approved by the water supplier. The water supplier shall obtain access to the water user's premises and shall ensure that the on-site protection meets the requirements of this chapter for installation, testing and inspections.

(f) Each backflow prevention assembly and air gap separation shall be accessible for field testing and maintenance.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code. Reference: Section 116375, Health and Safety Code.

Section 64764. Field Testing and Repair of Backflow Prevention Assemblies, and Air Gap Inspection.

(a) The water supplier shall require that all backflow prevention assemblies installed pursuant to this chapter be field tested following installation, repair, or relocation and at least annually thereafter. All required field testing shall be performed by persons who are currently certified in the testing of backflow prevention assemblies by California–Nevada Section of the American Water Works Association, the American Backflow Prevention Association, or an organization with equivalent certification requirements.

(b) Air-gap separations installed pursuant to sections 64760(a) and 64762(a) shall be visually inspected by the water supplier at least annually to determine compliance with this chapter.

(c) The water supplier shall ensure that backflow prevention assemblies that fail the field test are repaired or replaced within 30 days.

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NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

ARTICLE 6. ADDITIONAL CROSS CONNECTION CONTROL REQUIREMENTS FOR COMMUNITY WATER SYSTEMS

Section 64768. Requirements for Operating Rules of Service or Ordinances.

In addition to the applicable requirements in this chapter, each community water system shall implement a cross-connection control program that includes operating rules of service or ordinances adopted to enable the water supplier to:

- (a) Comply with the requirements of this chapter,
- (b) Discontinue a water user's service if designated criteria are not met,
- (c) Prevent cross connections, and
- (d) Provide protection against backflow.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

ARTICLE 7. RECORDKEEPING AND NOTIFICATION

Section 64770. Recordkeeping.

(a) Each water supplier shall maintain records of the following for a minimum of three years:

- (1) Most current hazard assessment, conducted pursuant to section 64755 (Hazard Assessment);
- (2) Locations and types of backflow protection and associated hazards;
- (3) Results of all backflow prevention assembly field testing and air gap inspections; and
- (4) Repairs made to, or replacement or relocation of, backflow protection.

(b) Summaries of the information in subsection (a) shall be available to the Department on request for a minimum of three years.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.
Reference: Section 116375, Health and Safety Code.

Section 64772. Notification.

Each water supplier shall notify the Department of any known incident of backflow into the public water system within 24 hours of discovery of the incident. If requested to do so by the Department, the water supplier shall submit a written report of the incident describing the nature and severity of the backflow, the actions taken by the water supplier in response to the incident, and the action plan intended to prevent such incidents in the future.

NOTE: Authority cited: Sections 116325, 116350 and 116375, Health and Safety Code.

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Reference: Section 116375, Health and Safety Code.